

## **PROGRESS REPORT NO. 161**

**TO:** Robert Tan, U.S. Environmental Protection Agency (EPA) – via Electronic

mail

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FROM: Kris McCaig, Teck American Incorporated (TAI)

Cc: Denise Mills, TAI – via Electronic mail

Rob Orr, TAI – via Electronic mail

**DATE:** December 10, 2019 FILE NO: 01-773180-000

**RE:** Upper Columbia River (UCR) Remedial Investigation/Feasibility Study

(RI/FS) - Progress Report No. 161 Month Ending November 2019

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Soil Amendment Technology Evaluation Study (SATES) – TAI continued coordination with the SATES team and Kira Lynch, Superfund Technology Liaison with the Office of Research and Development, Office of Science and Policy during the month. The Ohio State University (OSU) laboratory continued the bench-scale testing of the selected soil amendments through November 2019. The bench tests are being conducted in accordance with the Final Phase II Bench-Scale Treatability Testing Work Plan (May 2019) and Addendum No. 1 (July 2019). OSU collected the first set of samples from the test pots on October 11, 2019, one month after starting the bench-scale testing (i.e., time point 1). Analytical results for the amendment and baseline samples have been received and are pending validation. TAI is awaiting analytical results of samples collected on October 11.

## Baseline Ecological Risk Assessment:

Soil Toxicity Reference Values (TRVs) – TAI received an email from EPA on November 15, 2019 with "Response to TAI response to EPA Comments on Revised Draft Technical Memorandum for Soil Screening Levels for Plants and Invertebrates for the Baseline Ecological Risk Assessment." TAI worked on revisions to the document for submittal to EPA in December.

Sediment and Porewater TRVs – Follow up actions continued during the month of October on items identified during the Sediment and Porewater TRV workshop TAI and EPA held in March 2019 to work through EPA's comments on the October 2018 draft final TRV document. TAI provided presentation materials to EPA on November 27, 2019 for review prior to a technical conference call that, at the time of writing, occurred on December 5, 2019.

Weight of evidence (WOE) – TAI received a memo from EPA on November 20, 2019 with comments on TAI's October 10, 2019 Draft Preliminary Weight of Evidence Framework Matrix for Benthic Macroinvertebrates. The comments were discussed during the bi-weekly coordination call between TAI and EPA on November 21 and TAI proceeded with work on WOE based on the comments and clarification.

Chemicals of Potential Concern (COPC) Refinement Document – On November 27, 2019 TAI sent an email to EPA for review with some corrections that were needed to the COPC Refinement for Aquatic and Terrestrial Receptors (finalized August 2019), which affected Tables 4-1 and 6-1 and a small amount of text; transmitted with the email. Revisions to the summary tables were needed to correct inadvertent errors that occurred in the extraction and interpretation of results from the original media-specific tables in the document (Tables 4-2 through 4-10). It should be noted that none of the corrections to Table 6-1, the overall summary table, are related to the final identification of chemicals as a COPCs.

Upland Soil Background Assessment – TAI and EPA participated on a call on October 31, 2019 to discuss the data filtering refinements that were applied by TAI in developing the Draft Final Technical Memorandum titled "Assessment of Background Concentrations of Metals and Metalloids in Upland Soils," dated September 19, 2019. This included review of the resulting dataset and background threshold values presented in the draft final technical memorandum. As requested, TAI provided supplemental Q-Q plots on November 6, 2019 to facilitate EPA's review of the draft final memorandum. At the time of writing, TAI responded to EPA's second request for supplemental materials by providing more plots and the full database and final filtered dataset via email on December 2, 2019.

Phase 3 Sediment Study Sediment Facies Mapping – TAI continued preparation of the draft study data summary report and the draft technical memorandum with sediment composition and facies maps for the river reaches outside the Phase 3 areas of interest (AOIs). Both of these deliverables will integrate data acquired during the September-November 2018 and July 2019 field events.

## 2019 Phase 3 Sediment Study:

Toxicity Identification Evaluation (TIE) Pilot Study – TAI and EPA had a call on November 13, 2019 to discuss TAI's recommendations for additional testing to help refine the study plan for TIEs for the Phase 3 Sediment Study. TAI worked on a

memorandum describing the plan for additional work for submittal to EPA in December.

Porewater Extraction Method Study – As follow up to submittal of the draft report titled "Draft Porewater Extraction Method Study – Stage 1," to EPA in October, TAI sent an email to EPA November 22, 2019 with new data and figures from a repeated test with the small peeper in sediment (Test 3-3) and a notification that Tests 3-1 and 3-2 started on November 15, 2019. The email also contained a schedule for porewater collection on different days of the tests to give an idea of when data may be available for review.

Human Health Risk Assessment – TAI received a letter from EPA on November 8, 2019 with a copy of the Draft Upper Columbia River Site-Wide Human Health Risk Assessment for review and comment. EPA requested TAI provide comments no later than January 15, 2020.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4501.